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10/606,460	06/26/2003	Nayan H. Joshi	ATOTP0104US	3492

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EXAMINER	
BAREFORD, KATHERINE A	

ART UNIT	PAPER NUMBER
1762	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/606,460	JOSHI ET AL.	
	Examiner	Art Unit	
	Katherine A. Bareford	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-93* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *28-31,36-42,50,51,55,57-62,66,68-71,73-82 and 84-93* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Claims 1-27, 32-35, 43-49, 52-54, 56, 63-65, 67, 72 and 83 are canceled

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *attached*.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment of April 4, 2007 has been receive and entered. With the amendment, claims 1-27, 32-35, 43-49, 52-54, 56, 63-65, 67, 72 and 83 are canceled and claims 28-31, 36-42, 50-51, 55, 57-62, 66, 68-71, 73-82 and 84-93 are pending for examination.

Claim Objections

2. The objections to claims 28, 36, 40, 55, 60, 66, 73 and 82 because of informalities is withdrawn due to applicant's amendments of April 4, 2007 clarifying the language of the claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were

made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 28, 36, 40, 50-51, 55, 57-62, 66, 68-71, 73-76, 78-82, 84-87 and 91-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heiman (US 2580773) in view of Eckles (US 5405523) and EITHER Gundel et al (US 2892760) OR Hildering et al (US 3960677).

Claims 28, 36, 40, 60: Heiman teaches a process for depositing zinc or a zinc alloy protective coating on aluminum or aluminum based alloy substrates. column 1, lines 1-20, column 2, lines 30-40 and column 6, lines 60-75. Heiman teaches immersing an aluminum or aluminum based alloy substrate in an aqueous acidic immersion plating solution. Column 2, lines 30-50 and column 3, line 45 through column 4, line 5 (the amount of acid added would make the bath acidic). The bath can contain zinc ions and fluoride ions. Column 3, lines 45-50. The bath can also contain nickel and/or cobalt ions. Column 2, lines 30-40 and column 6, lines 60-75. The solution can be free of cyanide ions, as no cyanide is described of being present. See column 3, lines 45-60 and column 6, lines 60-75. The substrate is immersed in the bath for a period of time to deposit the desired coating. Column 5, lines 50-60. Then the coated substrate is removed from the immersion plating. Column 5, lines 50-60. The bath can be used to

perform immersion plating without electroplating or it can be used to perform electroplating. Column 3, lines 45-60, column 4, lines 15-20, and column 6, lines 70-75 (the bath can be used with or without current). The HF acid can be present in the solution in an amount of from 0.2 N to 2.5 N (1.0 N = 35.0 ml/l of HF of 48% acid). Column 3 line 65 through column 4, line 10.

Claim 40: after the substrate is plated with the zinc material, other materials can be electrodeposited on the plated substrate. Column 7, lines 20-30.

Claim 51, 69, 76, 85: the solution can contain other metal ions, including iron or manganese. Column 2, lines 35-40.

Claim 59, 70, 74, 84: the solution can be free of aliphatic amines and aliphatic hyroxylamines, as none is described as being present. See column 3, lines 45-60 and column 6, lines 60-75.

Heiman teaches all the features of these claims except (1) the pH of the solution, (2) the presence of the inhibitor, (3) the precise amounts of each material in the bath (claims 36, 57, 58, 60, 78, 79, 91, 87), (4) the presence of complexing agents (claim 50, 61, 62, 71), (5) the inhibitor material as a mercapto substituted nitrogen containing heterocylic compound, such as thiazole.

However, Eckles teaches a method for depositing a zinc alloy protective coating on metal substrates. Column 1, lines 45-55. The method is by electroplating. Column 1, lines 45-55. The method includes immersing a metal substrate in an aqueous acid plating solution having a pH of from about 3.5 to about 6.2. Column 2, lines 40-46. The

bath can comprise zinc ions, and nickel and/or cobalt ions. Column 2, lines 25-30 and column 4, lines 10-20. The bath also contains an "inhibitor" material containing nitrogen and/or sulfur atoms (the brightener). Column 2, line 46 through column 3, line 8. The substrate is immersed for a period of time sufficient to deposit the coating. column 6, lines 40-45. The substrate is removed from the bath, because the substrate must inherently be removed from the bath for use. The solution can be free of cyanide. Column 6, lines 25-40. The solution can contain 4--50 g/l of zinc ions. Column 4, lines 45-50. The solution can contain about 0.02--20 g/l alloying ions, such as nickel and/or cobalt. Column 4, lines 53-68. The solution can contain about 0.05—2 g/l of the nitrogen containing compound. Column 4, lines 5-10. The solution can contain acetate (one of applicant's claimed complexing agents). Column 4, lines 36-38. The nitrogen containing material can be a nitrogen containing heterocyclic compound. Column 2, lines 60-65.

Gundel teaches that it is desirable to use water soluble organic brightening agents in metal electroplating processes, such as zinc electroplating. Column 3, lines 35-45. The bath used can be an acid bath. Column 3, lines 65-75. The brightener can be a mercapto substituted nitrogen containing heterocylic compound in the form of a thiazole, such as a 2-mercapto-benzothiazole material, including 2-mercapto-benzothiazole-S-ethanol sodium sulfate. Column 3, lines 10-35. The amount of brightening agent provided can be 0.01 to 20 g/l. Column 3, lines 50-60.

Hildering teaches that it is desirable to use a heterocylic brightener in an acid zinc electroplating bath. Column 1, lines 5-10 and 45-50. The brightener can be a mercapto substituted nitrogen containing heterocylic compound in the form of a thiazole, such as 2-mercapto benzothiazole. Column 4, lines 5-10 and column 5, lines 1-10 (number (9)). The amount of brightener can be 0.1 to 10 g/l. Column 5, lines 25-30. Various conventional acid zinc solutions can be used. Column 5, lines 45-50.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Heiman to use the pH taught by Eckles in the bath with an expectation of desirable coating results, because Heiman teaches to provide an aqueous acid bath with zinc ions for immersion or electrolytic plating and that the acid in the bath can be 0.2 to 5 N, and Eckles teaches that in an aqueous acidic bath with zinc ions for electroplating the desirable pH is 3.5 to 6.2. One of ordinary skill in the art would optimize within that range to find the most desirable pH for the particular use desired. It would further have been obvious to modify Heiman to provide the brightener (inhibitor) material and complexing material in the bath as suggested by Eckles with an expectation of desirably bright coated material, because Heiman teaches to provide an aqueous acid bath with zinc ions for immersion or electrolytic plating, and Eckles teaches that in an aqueous acidic bath with zinc ions for electroplating it is desirable to provide a brightener and complexing material to provide a desirable appearance to the coating, and this desire for a bright appearance would be present for electroplating or immersion plating. It would further have been obvious to optimize

the ranges of material taught by Heiman in view of Eckles to provide the optimum amounts of materials for the precise purpose of the article to be coated, because both references teach desirable ranges of amounts of materials to be used in the bath and to provide the optimum for the purpose being used. It would further have been further have been obvious to modify Heiman in view of Eckles to further use a known brightener for acid zinc electroplating baths, such as a mercapto substituted nitrogen containing heterocylic compound, as taught by EITHER Gundel OR Hildering in order to provide a desirably bright coating, because Heiman in view of Eckles suggests a zinc plating process with brightener as used for zinc electroplating whether the plating process is immersion or electrolytic and both Gundel and Hildering teaches conventionally known brightening agents for zinc electroplating are conventionally known to be mercapto substituted nitrogen containing heterocylic compound, such as thiazoles that contain 2-mercapto-benaothiazoles. Both Gundel and Hildering also teach that the amount of the brightening agent used overlaps with the amount claimed by applicant for the mercapto substituted nitrogen containing heterocylic compound, and it would have been obvious to one of ordinary skill in the art to optimize the amount used from the taught ranges. As the mercapto substituted nitrogen containing heterocylic compound used as a brightener and the amounts used overlap with what is claimed by applicant as an "inhibitor", the brightener reads on the "inhibitor" as claimed.

6. Claims 29-31, 37-39, 41-42, 77 and 88-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heiman in view of Eckles and EITHER Gundel OR Hildering as applied to claims 28, 36, 40, 50-51, 55, 57-62, 66, 68-71, 73-76, 78-82, 84-87 and 91-93 above, and further in view of Haydu et al (US 5182006).

Heiman in view of Eckles and EITHER Gundel OR Hildering teaches all the features of these claims except the precise cleaning process. Heiman teaches that prior to coating the article is first thoroughly degreased and cleaned so as to remove any grease, dirt or other undesirable foreign materials on the surface. Column 3, lines 5-10. The surface is also treated prior to coating with acid. Column 3, lines 15-25. Cleaning can be perfomed with an alkaline cleaner. Column 3, lines 40-45. After cleaning the article can be water rinsed. Column 3, lines 20-27.

Haydu teaches that it is conventional to prepare aluminum substrates for zincating by alkaline cleaning followed by a cold water rinse, then etching followed by a water rise, then desmutting followed by a rinse, and then zincate coating by an immersion zinc bath. Column 2, lines 5-20. Haydu also teaches that the zinc coating bath also functions as an etching solution. Column 32, lines 25-30. It is also known follow the first zincate coating with a second zincate coating. Column 2, lines 30-40. Cleaning can be done with an alkaline cleaner. Column 4, lines 1-10. Etching can be done with an acid etchant. Column 4, lines 10-20.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Heiman in view of Eckles and EITHER Gundel OR

Hildering to use the full cleaning process taught by Haydu in order to provide a fully prepared substrate for coating because Heiman in view of Eckles and EITHER Gundel OR Hildering teaches a zincate plating process and Haydu teaches a cleaning process to fully prepare a substrate for zinc plating. The rinsing of the immersion plated article would be suggested as further treatment is to be provided.

7. Claims 28-31, 36-42, 50-51, 55, 57-62, 66, 68-71, 73-82, and 84-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 2000-256864 (hereinafter '864) in view of Haydu et al (US 5182006) and EITHER Gundel et al (US 2892760) OR Hildering et al (US 3960677).

Claims 28, 36, 40, 60: '864 teaches a process for depositing zinc or a zinc alloy protective coating on aluminum or aluminum based alloy substrates. Abstract and paragraphs [005] – [0007] (note iron, nickel, copper, etc. can be used with the zinc). '864 teaches immersing an aluminum or aluminum based alloy substrate in an aqueous acidic immersion plating solution. Abstract and paragraph [0006]. The pH can be between 1 and 5, such as 4. Abstract, paragraph [0006], and paragraph [0034] (Table 1, example 6). The bath can contain zinc ions and fluoride ions. Abstract and paragraphs [0012] – [0013]. The bath can also contain nickel and/or cobalt ions. Paragraphs [0007] and [0016]. The solution can be free of cyanide ions, as no cyanide is described of being present. See paragraphs [0005] – [0019]. The substrate is immersed in the bath for a period of time to deposit the desired coating. Paragraph [0009]. Then the coated

substrate is removed from the immersion plating. Paragraph [0009] (as it is only immersed for a certain amount of time). The amount of zinc ions can be 1-50 g/L. Paragraph [0012]. The amount of nickel and/or cobalt ions can be an amount greater than 0.0001 g/L. Paragraph [0016]. The amount of fluoride ions can be 0.1 to 20 g/L. Paragraph [0014].

Claims 29-31, 37-39, 41-42, 77, 88, 89, 90: before treatment, cleaning and alkali etching can be performed. Paragraph [0031].

Claim 40: after the substrate is plated with the zinc material, other materials can be electrodeposited on the plated substrate. Paragraph [0028].

Claims 50, 61, 62, 71, 75, 80, 93: complexing agents as defined in claim 62 can be present in the plating solution. Paragraph [0017]. The amount of complexing agent can be 1-50 g/L. Paragraph [0017].

Claim 51, 69, 76, 85: the solution can contain other metal ions, including iron or copper. Paragraph [0016].

Claim 57, 78: The amount of zinc ions can be 1-50 g/L. Paragraph [0012]. The amount of nickel and/or cobalt ions can be an amount greater than 0.0001 g/L. Paragraph [0016].

Claim 59, 70, 74, 84: the solution can be free of aliphatic amines and aliphatic hyroxylamines, as none is described as being present. Paragraphs [0005]—[0019].

Claim 68, 86, 92: the plating solution can have a pH of 4, for example. Abstract, paragraph [0006], and paragraph [0034] (Table 1, example 6).

Claim 87, 91: The amount of fluoride ions can be 0.1 to 20 g/L. Paragraph [0014].

'864 teaches all the features of these claims except (1) the presence of the inhibitor, (2) the precise amounts of each material in the bath (claims 36, 57, 58, 60, 78, 79, 91, 87), (3) the precise cleaning process (claim 29-31, 37-39, 41-42, 77, 88-90), (4) the precise inhibitor material as a mercapto substituted nitrogen containing heterocylic compound, such as thiazole.

Haydu teaches that it is conventional to prepare aluminum substrates for zincating (zinc immersion plating) by alkaline cleaning followed by a cold water rinse, then etching followed by a water rise, then desmutting followed by a rinse, and then zincate coating by an immersion zinc bath. Column 2, lines 5-20. Haydu also teaches that the zinc coating bath also functions as an etching solution. Column 32, lines 25-30. It is also known follow the first zincate coating with a second zincate coating. Column 2, lines 30-40. Cleaning can be done with an alkaline cleaner. Column 4, lines 1-10. Etching can be done with an acid or alkaline etchant. Column 4, lines 10-20. Haydu further teaches that when performing the zincate plating, it is desirable to use an additive that is a nitrogen containing heterocylic compound, which is a known brightener additive for zinc electroplating solutions. Column 2, line 60 through column 3, line 35. The amount added of the additive is 0.1 to 5 % by volume. Column 3, lines 40-45. The use of the additive improves the smoothness and brightness of a later electroplated nickel overcoating. Column 7, lines 1-10. The use of additive also provides for a thinner applied zinc coating applied than without the additive. Column

7, lines 10-25. This indicates that the material acts as an "inhibitor" limiting the amount of coating applied.

Gundel teaches that it is desirable to use water soluble organic brightening agents in metal electroplating processes, such as zinc electroplating. Column 3, lines 35-45. The bath used can be an acid bath. Column 3, lines 65-75. The brightener can be a mercapto substituted nitrogen containing heterocylic compound in the form of a thiazole, such as a 2-mercapto-benzothiazole material, including 2-mercapto-benzothiazole-S-ethanol sodium sulfate. Column 3, lines 10-35. The amount of brightening agent provided can be 0.01 to 20 g/l. Column 3, lines 50-60.

Hildering teaches that it is desirable to use a heterocylic brightener in an acid zinc electroplating bath. Column 1, lines 5-10 and 45-50. The brightener can be a mercapto substituted nitrogen containing heterocylic compound in the form of a thiazole, such as 2-mercapto benzothiazole. Column 4, lines 5-10 and column 5, lines 1-10 (number (9)). The amount of brightener can be 0.1 to 10 g/l. Column 5, lines 25-30. Various conventional acid zinc solutions can be used. Column 5, lines 45-50.
It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '864 to use the full cleaning process taught by Haydu in order to provide a fully prepared substrate for coating because '864 teaches a zincate immersion plating process and Haydu teaches a cleaning process to fully prepare a substrate for immersion zinc plating. The rinsing of the immersion plated article would be suggested as further treatment is to be provided. It would further have been obvious to modify

'864 to use the brightener (inhibitor) additive material suggested by Haydu in the bath of '864 with an expectation of desirably smoothed, thin and brightened resulting coated article, as '864 teaches a zincate plating system with various additives and Haydu teaches that it is further desirable to use a brightener additive of a nitrogen containing heterocylic compound known to be used in zinc electroplating to provide a desirable thinned and brightened resultant coating. It further would have been obvious to modify '864 in view of Haydu to optimize within the ranges given of the various amounts of materials to find the optimum amounts of metal, fluoride and inhibitor materials as in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990). As well "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). See MPEP 2144.05. It would further have been further have been obvious to modify '864 in view of Haydu to further use a known brightener for acid zinc electroplating baths, such as a mercapto substituted nitrogen containing heterocylic compound, as taught by EITHER Gundel OR Hildering in order to provide a desirably bright coating, because '864 in view of Haydu suggests a zinc plating process with brightener as used for zinc electroplating when the plating process is immersion and both Gundel and Hildering teaches conventionally known brightening agents for zinc electroplating are conventionally

known to be mercapto substituted nitrogen containing heterocylic compound, such as thiazoles that contain 2-mercapto-benaothiazoles. Both Gundel and Hildering also teach that the amount of the brightening agent used overlaps with the amount claimed by applicant for the mercapto substituted nitrogen containing heterocylic compound, and it would have been obvious to one of ordinary skill in the art to optimize the amount used from the taught ranges. As the mercapto substituted nitrogen containing heterocylic compound used as a brightener and the amounts used overlap with what is claimed by applicant as an "inhibitor", the brightener reads on the "inhibitor" as claimed.

Response to Arguments

8. Applicant's arguments with respect to claims 28-31, 36-42, 50-51, 55, 57-62, 66, 68-71, 73-82 and 84-93 have been considered but are moot in view of the new ground(s) of rejection.

The Examiner has provided the new references to Gundel and Hildering as to the use of the claimed mercapto substituted nitrogen containing heterocylic compound.

The Examiner notes applicant's arguments, however, they do not overcome the new rejection. As to applicant's arguments that just because a given additive may work in electroplating, there is no reason to believe or expect that the same additive would work in immersion plating, and that as to the use of any brightener in the electroplating art is empirical, The Examiner disagrees as to the specifically claimed mercapto

substituted nitrogen containing heterocylic compound (the present "brightener"/"inhibitor"). While the "development" and determination of brightening additives for specific electroplating baths may be empirical, the references to Gundel and Hildering show that such development and empirical studies have already been done for various mercapto substituted nitrogen containing heterocylic compound brighteners as these references provide the use of the material, the amounts of the material, and the use of zinc acid electroplating baths. As to the use of such additives in a zinc immersion bath, the Examiner notes that (1) in the case where the primary reference is to Heiman, the initial bath in Heiman is taught to be usable for both electroplating or immersion, thus indicating the suggestion that the materials in the bath will provide the desired results whether electroplating or immersion plating is done and (2) in the case where the primary reference is to '864, the reference to Haydu explicitly provides for the use of a zinc electroplating brightener in a zincate (immersion) bath with an expectation of desirable brightening results, thus indicating that brightening will occur in both electroplating and immersion baths when a known brightener is used.

As to applicant's arguments as to the previously provided Declaration by Mr. Joshi, the Examiner notes applicant's arguments that Mr. Joshi's sworn testimony was not in the form of opinion evidence. The Examiner disagrees. Mr. Joshi's statements in the October 26, 2006 declaration were "opinion" evidence as compared with "objective" evidence as Mr. Joshi merely made statements without providing "objective" evidence

such as test results or journal articles to support his statements. In paragraph 11 of the Office Action of Dec. 4, 2006, the Examiner made a lengthy and detailed examination of Mr. Joshi's statements, complete with a discussion of the objective evidence supporting the Examiner's position. Applicant refers to the Examiner as attempting "to use the isolated disclosures of the references to rebut Mr. Joshi's statements of fact, many of which relate to the art in general . . .". The Examiner notes that as discussed in paragraph 11 of the Office Action of Dec. 4, 2006, Mr. Joshi made broad statements such as "There is no reason that one of ordinary skill in the art would add a brightener to an immersion plating solution intended for use as a replacement for the alkaline zincate processes of the prior art.", noting that ". . . brightener is not only not needed, but has no function to perform." (paragraph (6) of the declaration). The Examiner rebutted this statement by noting that Haydu specifically teaches the desire to use a brightener in a zincating bath. This is not an isolated disclosure, but notes that the objective data in the case provides that the art would have knowledge of using a brightener in an immersion zinc plating process. Similarly, the Examiner maintains her position as to the other elements of the declaration discussed in paragraph 11 of the Office Action of Dec. 4, 2006.

As to applicant's arguments as to "obvious to try", the Examiner disagrees. It is the Examiner's position that the present rejections above provide for an explicit teaching of materials and amounts to be used of brightener and a clear suggestion to use such brightener in a zinc immersion plating bath.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:00-3:30) with the First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KATHERINE BAREFORD
PRIMARY EXAMINER